Pergamon

Geoforum, Vol. 29, No. 1, pp. 51–68, 1998

Printed in Great Britain
0016-7185/98 $19.00 + 0.00

PII: S0016-7185(97)00017-1

Sustainability, Water Resources and Regulation

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(*Received* 3 *April* 1997; *revised* 28 *August* 1997)

Abstract: It has been suggested that regulatory analysis and regulation theory provide appropriate foundations for the analysis of the sustainability problematic. We accept these claims and in this paper provide an interrogation, founded in the literature on 'real' regulation, of a judicial decision concerning the allocation of water resources to farm irrigation in Northland, Aoteroa/New Zealand. The fact that 'sustainable management' has been inscribed in that country's resource management legislation has given focus to social contests over the meaning and interpretation of sustainability. We outline the legislative framework and then provide a description of the contests over the allocation of water to dairy pasture irrigation. Competing interpretations of 'sustainable management' were at the centre of these contests. We then attempt to characterise 'regulatory space'. In the discussion we emphasise the social construction of sustainability and the legitimation of competing interpretations through the courts and other fora. We also refer to the geography of regulation, noting that regulatory processes and their outcomes are defined spatially. Lefebvre's concept of representational space and the Lefebvrian and Foucaultian notion of sites of resistance help us to interrogate competing perspectives on sustainability. © 1998 Elsevier Science Ltd. All rights reserved

Key words: regulatory analysis, sustainability, resource management, indigenous relations, environmental law, water resources.

Introduction

It has been submitted that regulatory analysis and regulation theory have relevance for the interrogation of sustainability (Flynn and Marsden, 1995; Gibbs, 1996). According to Flynn and Marsden (1995), p. 1188) the "greatest normative challenge for regulatory analysis lies in the area of sustainability". To them, the important questions pertain to the meaning of sustainability and how a sustainable development path is to be maintained, that is, what are the necessary regulatory frameworks? Similarly, Drummond and Marsden (1995) have argued that regulation theory is an appropriate foundation for both positive and normative explorations of sustainability and they attempt to situate the sustainability imperative within the wider dynamics of the evolution of

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capitalism. In contrast to *regulation theory* (Jessop, 1990, 1995; Marden, 1992) 'real' regulation refers to a more grounded social process, embedded in administrative frameworks and practice (Clark, 1992). The deployment of 'real' regulation in the analysis of sustainability has been limited so far (e.g. Blunden *et al.*, 1996; Cocklin *et al.*, 1997), yet it offers scope for interpreting the contemporary role of the state in administering resource use and allocation, as well as the role of other social agents in mediating and implementing legislation.

The regulation of sustainability has been given focus in Aotearoa/New Zealand through the inscription of 'sustainable management' as the key principle of that country's resource management and planning legislation, the Resource Management Act 1991 (hereafter the RMA). Given the widely acknowledged fact that sustainability is persistently elusive in its meaning (see, for example, Cocklin, 1995; Pierce, 1992; Gale and Cordray, 1994) it is of little surprise that embedding 'sustainable management' in legislation would give rise to contestation over its interpretation and implementation. The administrative arrangements, both formal and informal, for resource management and planning furnish the structure within which these contests are played out. Thus, there is relevance in Munton's (Munton, 1995, p. 283) claim that: "As an administrative process concerned with implementing planning policy and guiding the development of land, the planning system is a classic example of real regulation in practice".

This paper is a study in the regulation of sustainability, or more correctly 'sustainable management',[1] based in the implementation of Aotearoa/New Zealand's resource management legislation. Our analysis is given focus through an inquiry into decisions under the legislation over the allocation of water resources to an agricultural irrigation project. The irrigation project presents a salient example of 'real' regulation applied to sustainability/sustainable management. We conceptualise regulation as a social process involving the state, operating at several geographical scales (national, regional, local), and involving various other public and private agents. Real regulation has been described elsewhere as a circuit of formulation, enactment, and interpretation (Moran *et al.*, 1996). It is the latter that we emphasise in this analysis since it is in the context of decisions over resource allocation and use that the interpretation of 'sustainable management' under the RMA is being contested, with various interests striving to impose constructions of meaning consistent with their own objectives. The outcomes of these contests are significant in both an immediate sense and also in the precedents that are established through judicial interpretations of the law.

The role of agency in regulation (see Lowe *et al.*, 1993; Hancher and Moran, 1989) takes on a special quality in Aotearoa/New Zealand, by virtue of the involvement of the indigenous Maori. Over the last two decades, Maori have strongly reasserted their rights to resources, with a limited measure of success. The inclusion of Maori words and terms within the RMA is indicative of the wider accord that has been extended to their cultural and spiritual values in respect of resource use. However, the role and status of Maori is strongly conditioned by regulatory processes that are dominated by the ascendant Eurocentric worldview. As we will show in the analysis of the irrigation proposals, unequal power relations, the character of 'regulatory space' (Hancher and Moran, 1989), and the status of alternate knowledges contributed to outcomes of the regulatory process that the Maori consider unfavourable.

Our approach, then, is to work within a framework defined broadly by recent conceptualisations of real regulation. Focussing on 'regulatory space' permits us to develop an explanation of the irrigation case that emphasises the geographic dimensions of regulation in practice. Thus, international commodity markets, national-level restructuring programmes, and the campaigns of farmers and the local Maori are described as intersecting influences on the interpretation and implementation of regulations pertaining to the management of natural resources. A second important theme that we develop within this framework is the role of local agency, and particularly the significance of competing discourses over the interpretation of sustainability. The emphasis on discourse and the explicit acknowledgment of differential power and authority that underpin specific discourses adds value to the existing literature on regulatory analysis. Whereas contributions to both regulation theory and real regulation have drawn attention to the importance of agency, the variable command of competing discourses has not been acknowledged as explicitly.

We begin our analysis with an account of the regulatory context in which the applications for water resources were presented, followed by a fuller

description of the decisions over the allocation of the resource. In this discussion we highlight the contested interpretations of sustainability. The second substantive part of the paper provides an interpretation of the irrigation case with recourse to the literature on regulation and in which we emphasise the contestation of the interpretation and implementation of the RMA.

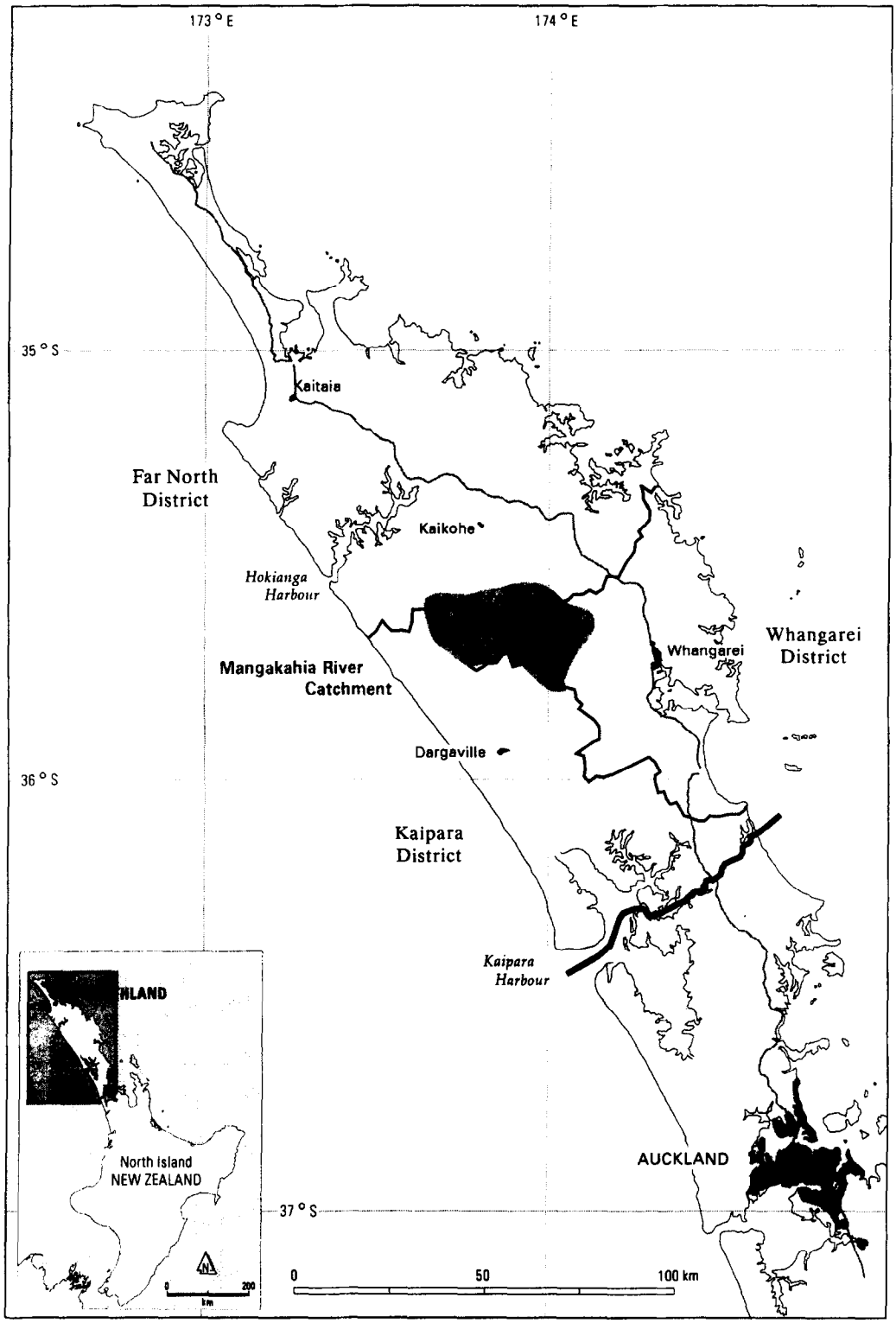

Figure 1. The Northland Region, New Zealand.

Fields of dreams—the irrigation proposals

Applications for the diversion and extraction of water from the Mangakahia River in central Northland, Aotearoa/New Zealand (Figure 1) for the purpose of irrigating dairy pasture provide a context for our analysis of the regulation of sustainable resource management. We begin by providing a brief outline of some of the characteristics of the regulatory environment which are central to the study. This is followed by a description of the irrigation proposals and the associated contest over the interpretation of sustainable management.

The regulatory context

In 1993 a group of 25 dairy farmers, calling themselves the Mangakahia Irrigation Committee (MIC), collectively submitted applications for the diversion and abstraction of water from the Mangakahia River and its tributaries for the purpose of pasture irrigation. The prevailing legislation under which the resource use consents had to be obtained was the RMA. This legislation has been widely applauded for what are regarded to be innovative features, including the fact that the Act inscribes 'sustainable management' as its guiding principle. The RMA has been described and reviewed elsewhere (Burton and Cocklin, 1996; Furuseth and Cocklin, 1995a; Grundy and Gleeson, 1996; Memon and Gleeson, 1995; Robertson, 1993) but four features of the legislation warrant mention here. The first is to highlight the inclusion of the sustainability principle; the purpose of the RMA "is to promote the sustainable management of natural and physical resources" wherein sustainable management is defined as:

> ...managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while
> (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
> (b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
> (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment (RMA, Pt II, s5(2)).

The inclusion of the sustainability principle and its specific wording is reflective of the historical origins of the legislation in the immediate post-Bruntland period. Note for example the reference to intergenerational equity, which was a widely heralded feature of *Our Common Future* (WCED, 1987). As we have suggested already, the interpretation of the sustainable management principle is contested within Aotearoa/New Zealand's political and legal arenas, as various stakeholder groups attempt to establish credibility for senses of meaning that favour their own objectives.

A second feature of the RMA of specific relevance here is that it is based on a devolved administrative structure. At the same time that the RMA was being drafted, local government in Aotearoa/New Zealand was substantially reorganised (Cocklin and Furuseth, 1994; Dixon and Wrathall, 1990; Moran, 1992). This reorganisation gave rise to a two-tier system of subnational government, comprised of district and city councils (TLAs—territorial local authorities) and a group of regional councils. Recognising that the regional councils would play a central role in the management of natural resources, their geographic boundaries were drawn with reference to major river catchments. With the administrative structure in place, the RMA then defined the specific responsibilities of the TLAs and the regional councils in respect of the management of natural and physical resources. The regional councils hold responsibility for freshwater resources, coastal management, pollution, wastes, and air quality. The TLAs are primarily responsible for land use. With a view to our subsequent discussion, note that the devolved administrative structure for resource management permits local interpretation of the legislation, in the expectation that there will be geographic diversity in the translation and mediation of the general principles established within the Act. This was a designed feature of the Act, based on the premise that decisions relating to the management of resources should be taken at the local level, with control over resource allocation invested in those who have the most direct interest in the outcomes (Cocklin and Furuseth, 1994).

The third characteristic of the RMA to which we draw attention is the explicit reference to Maori cultural and spiritual values and the inclusion of Maori words and terms, which makes the Act unique internationally. Reference to Maori cultural and spiritual values is made at various places in the RMA, including the need to "recognise and provide for... matters of national importance" which includes "The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu (sacred

places), and other taonga (literally, treasures)[2]" (RMA, Pt II, s6(e)). The Act also requires that account is taken of the Treaty of Waitangi, the landmark agreement signed between the Crown of England and Maori tribal leaders in 1840. Reference to the Treaty and the inclusion of Maori terms and concepts in respect of resource management is at least superficially an important step forward in terms of guaranteeing a role for Maori in decisions over the allocation and use of resources, as well as formally acknowledging the significance of their cultural and spiritual values *vis à vis* resources and the environment. What weight is given in practice, however, will be the real measure of the extent to which distinctly Maori values and principles are incorporated into determinations over the sustainable management of resources.

Our fourth note refers to the prevailing system of allocating water resource rights. Under the RMA regional councils have the responsibility to consider applications for rights to water, including diversions and use, as well as discharges. Water rights are assigned via what are referred to generally under the RMA as 'resource consents' and more specifically 'water permits'. The RMA requires that applicants must provide the respective regional council with an assessment of the environmental effects of the proposed activity and the general expectations that pertain to the scope and content of these assessments are specified in the Act. Regional councils have discretion over any conditions that might be attached to the resource consents and discretion also over the duration of the entitlement. Thus far, most regional councils in Aotearoa/New Zealand have persisted with a first-in-time, first-in-right allocation regime, although there is increasing interest in the use of tradeable permit systems.

The irrigation proposals

Attributes of the physical environment partly establish the rationale for dairy pasture irrigation in Northland. The region is prone to summer drought, for example, which limits the production season for pastoral dairy farmers. Irrigation is expected to prolong the season and the most optimistic estimates suggest a doubling of production levels. A strong incentive to increased production lies in the currently favourable returns to dairy production, compared to other types of pastoral farming (eg. sheep, beef). There are expectations also of better net returns in this post-GATT era, when Aotearoa/New Zealand's producers will be able to more effectively reap the benefits of their competitive advantage in dairy production, once other nations reduce their subsidies to domestic producers and remove import tariffs.

The Mangakahia Irrigation Committee first submitted their applications for resource consents under the RMA in 1993. Since the management of fresh water resources is a responsibility conferred upon regional councils, the applications were submitted in this case to the Northland Regional Council (NRC). The applications followed a standard process under which they were notified publicly and submissions were called for. A total of 23 submissions were made. Seven supported the proposals, most referring to the economic benefits. Amongst these were submissions from the company that would supply the irrigation equipment, the milk processing company, the local chamber of commerce, the regional power company, and agricultural consultants. Opposing submissions were lodged on three main grounds. The local Maori expressed opposition on the grounds that the abstraction of water would be in direct conflict with cultural and spiritual values. They expressed the view also that there had been inadequate consultation and that insufficient time had been allowed for the preparation of submissions. The second main basis for objection was the anticipated environmental impacts. The Department of Conservation, a national-level governmental organisation charged with responsibility for managing natural and cultural heritage, expressed concerns for the impact on river habitats and ecology. The third basis for objection to the proposals was the opportunity cost to other existing and potential users of the resource.

The NRC eventually convened public hearings on the applications in 1994. The Council committee approved the applications, but allocated considerably less water than the MIC had applied for (by about 20%) and also awarded consents of five–ten years duration, being considerably shorter than the 25 years the farmers had requested. The Council also imposed conditions on the consents relating to the treatment of farm effluents, environmental monitoring by the farmers, and a rationing regime under low flow conditions.

The Council promoted their decision as being based on a precautionary principle, acknowledging the uncertainties as to the environmental effects of extracting water from the catchment. Conveying the decision, it was commented that:

> The Committee concludes that the effects of the proposal on the river ecology, and in particular factors such as river temperature, nutrient input from irrigation, and macrophyte growth in the river, are not able to be conclusively determined at this stage... A cautionary approach is therefore intended in making its decision on the applications. It is therefore intended to address this by imposing a relatively short term for any consents granted (Northland Regional Council, 1994, p. 8).

The members of the MIC were not content with the Council's decision and neither were the local Maori. To the Maori, the river is important as a food source and holds significant spiritual value. Under Maori lore, the diversion or disturbance of a water body inevitably diminishes its spiritual integrity. Thus, any allocation of water would interfere with their relationship with the river.

The process under the RMA provides for decisions to be appealed to a judicial body known as the Planning Tribunal (renamed the Environment Court in 1996). The Tribunal is typically composed of a judge and two lay members. Both the MIC and Maori filed appeals against the decision of the NRC with the Planning Tribunal and the case was heard during 1995. The fact that Maori cultural and spiritual values were prominent meant that the case was looked to as an important one in terms of establishing just what weight should be accorded to the role and status of Maori in decisions over resource allocation and use. The Tribunal hearings also gave close attention to the question of environmental effects, with the farmers bringing forward consultants to provide expert testimony in support of their claim that the abstractions would not cause undue environmental damage. Significantly, the Maori did not submit contrary expert testimony in respect of the environmental effects and the Department of Conservation did not appear before the Tribunal, having been satisfied with the NRC's determination over water allocation. The evidence submitted by the Maori focussed instead on their interpretations of the spiritual and cultural significance of the river and its important use values.

In the final event, the Planning Tribunal upheld the allocation of water to the MIC and indeed increased both the allocation of water (by 20%) and the duration of the resource consents (by one year). The decision of the Tribunal is significant in terms of what it reveals about alternative interpretations of sustainable resource management.

Contesting 'sustainability'

In an immediate sense, the contest over the irrigation proposals in the Mangakahia relates to property rights. Property rights represent a fundamental social relation, carrying with them not only entitlements to production and consumption, but also political and symbolic authority. Inevitably, then, property rights will be both defended and challenged stridently. Thus, the construction of meaning in terms of property rights in natural resources and the regulations through which these rights are established and upheld will be subjects of intense contest. Also, the effectiveness of agents' representation in contests over property rights will be defined by the character of localised socio-political and economic relations. Munton (1995) and Lowe *et al.* (1993) provide evidence in support of this with reference to land developments in the United Kingdom.

Water permits issued under the RMA constitute a property right in water. By approving the permits for pasture irrigation, the effect is to reallocate water from the realm of collective consumption to that of private consumption and the nature of the use (i.e. irrigation) ensures exclusivity of the entitlement. Thus, the farmers sought to appropriate a quantity of the resource for their private benefit, whereas the objections from local Maori referred to a collective right to enjoy the resource in its existing state, from which they derive both use values (e.g. food) and spiritual values.

The Mangakahia case raised other fundamental issues, however; indeed the deliberations went directly to the interpretation of 'sustainable management'. We drew attention previously to the important fact that the RMA embodies Maori terms and also suggests a role for partnership in the management of resources by way of the reference to the Treaty of Waitangi.[3] The inclusion of Maori terms in the RMA raises an interesting question however:

> Thus, one understanding of the incorporation of Maori terms directly into the text of the RMA is as a simple gesture of respect on the part of the drafters of the statute, seeking to find some indigenous approximation of the common law concepts they intended to embody in the Act. But the alternative view is that terms like kaitiakitanga[4] represent portals for the entry of distinctly Maori principles governing the human-environment relationship into mainstream New Zealand environmental law.
> This distinction is an important one, because while common law notions of guardianship and stewardship presuppose a trust relationship within the confines of an

individualized private property regime, the Maori perspective does not (Burton and Cocklin, 1996, p. 98).

Like other aspects of the RMA, a measure of latitude is extended to the individual local and regional authorities as to how the general principles expressed in the Act in respect of Maori should be expressed in policy and interpreted on a case-by-case basis. As the Northland region has the second highest proportion of Maori residents of any region in the country (22% Maori at the 1991 Census), the statement of regional policy in respect of resource management not surprisingly makes reference to the role and status of Maori. Therein a stated objective is:

> Involvement of tangata whenua in the management of the natural and physical resources of the region in a manner that recognises and respects tangata whenua and ahi kaa as kaitiaki o nga taonga tuku iho (guardians of the treasures of their ancestors, as handed down) (Northland Regional Council, 1993a, p. 57).

For those who exercise decision-making authority under the RMA, an important and potentially contentious issue arises in respect of just how much weight should be given in practice to the principles expressed in the legislation and to the localised interpretations in policy statements, such as the one above.

When the irrigation proposals first came before the Northland Regional Council, council officers prepared a document in anticipation of the Council's hearings on the matter. In that document, they concluded that:

> It is considered that taking into account the Northland Regional Council's commitment to recognise and provide for the relationship of Maori and their culture and traditions with water, the perceived benefits of granting the consents for a use of water which has not been fully proven in the Northland situation does not outweigh a known adverse effect on the cultural and spiritual value of the Mangakahia River as taonga to the tangata whenua (Northland Regional Council, 1993b, p. 5).

In the event, the hearing was deferred for one year, at the request of the applicants. In the intervening period, the NRC arrived at a different view in respect of the significance of Maori cultural and spiritual values. As we noted already, when it came to the actual decision the Council approved the applications, although for less water and with consents of shorter duration than had been asked for. In conveying the decision and in respect of Maori concerns, it was succinctly concluded that: "The concerns of Iwi[5] and other submitters are met by the conservative approach taken" (Northland Regional Council, 1994, p. 18).

This view was mistaken and the local Maori appealed the decision to the Planning Tribunal. The decision of the Tribunal is illuminating in respect of the interpretation that is evolving in respect of the status of Maori values in the 'sustainable management' of Aotearoa/New Zealand's resources. In the text of the Tribunal's decision they cited the following comment with approval:

> . . .notwithstanding the obvious lead into Maori interests that the wording of section 5(2) provides, management of natural and physical resources under the Act should also be concerned with enabling the provision of cultural well-being for New Zealand's non-Maori peoples (Mangakahia Maori Komiti vs. A. Rika and ors, p. 48).

The Tribunal's endorsement of this interpretation was carried through to the decision over the irrigation consents, as our subsequent citations from the decision will confirm.

The petitions of Maori in respect of resource use decisions are as much about cultural sustainability as they are intrinsically about environmental protection. Their approach to the environment is not simply a preservationist one, but is utilitarian in the sense that resources are there to sustain people, who in turn are stewards of the environment. The ethic of stewardship is inscribed in social conventions and in systems of beliefs. The irrigation projects would both subvert spiritual beliefs, as well as perhaps compromise the ability of the resource to sustain uses such as food provision. In this and other cases, the more utilitarian issues can be addressed directly, by establishing whether indeed the ecology of the river would be affected unduly. The spiritual issues are much more difficult to resolve, however, and indeed border on being intractable. The decisions of both the NRC and the Planning Tribunal seem to assume a divisibility of spiritual values, in the sense that there is some acceptable proportion of the water that can be allocated. Thus, by assigning quantities of a resource less than had been requested, the spiritual (and cultural) concerns of Maori were catered for. In practical terms, compromise of this kind might be the only widely acceptable alternative, but there is reason to question whether in terms of the spiritual values that attach to the environment a 'little bit' is any different from 'a lot'. Therein lies the intractability of resolving what are effectively irreconcilable cultural

perspectives and it seems that the place of Maori cultural and spiritual values in terms of the sustainable management of Aotearoa/New Zealand's natural resources is at best uncertain.

Another issue of interpretation relates more directly to the very meaning of 'sustainable management' under the Act. The academic literature bears wide testimony to the fact that there are many and contested meanings attached to the word 'sustainability'. The fact that in Aotearoa/New Zealand the concept has been imbedded in law adds interest to the contestation of meaning, although as the discussion here reveals, the debate remains focussed, as it does elsewhere, on the priorities assigned respectively to environment, economy and society.

Contestation of interpretation centres on whether the statement of purpose of the Act implies the need to balance environmental, social and economic priorities, or whether social and economic issues are subordinate to the environment when it comes to decisions under the RMA. According to the latter interpretation, the RMA constitutes an environmental 'bottom line'. It is a position that is justified by its advocates through the argument that economic interests are catered for primarily by the market and social concerns should be addressed via such things as provisions for welfare and community support. The argument derives from an ideology of public sector administration favouring simplicity and transparency of objectives, which in turn promotes accountability for decisions. Thus, a Minister for the Environment has explained that:

> The conservative position in this debate is that section 5 (in which sustainable management is defined—see earlier discussion) is all about balancing socio-economic aspirations with environmental outcomes... The progressive view is that the purpose of the Act is to secure a particular environmental ethic (Upton, 1994, p. 3).

The Minister commented further that:

> The addition of the references to people and communities, and amenity values is significant. But the inclusion of people was not to introduce a balance or trading-off of the sustainable management of natural and physical resources (Upton, 1994, p. 8).

While this is the interpretation of sustainable management that the Minister has promoted, it is not one that is shared by all of the judges on the Planning Tribunal and it is not an interpretation that is favoured by many resource users. One of the Tribunal judges pointed to the latitude offered to decision makers by the ambiguity of the wording of the relevant section of the Act:

> "Any judge, commissioner or councillor if faced with a decision of magnitude, could by careful wording of a decision, set to one side the principles of the RMA which did not suit the desired conclusion... The decision maker can thus reach a decision based on community values presently existing, and then find a section of the Act or a part of a regional or district plan which supports that subjective judgement" (Judge Treadwell, cited in Upton, 1994, p. 4).

In the decision on the Mangakahia irrigation applications, the presiding Tribunal referred also to the latitude extended by the wording of section 5 and in so doing presented a fundamentally different interpretation of sustainable management:

> Paragraphs (a), (b) and (c) of s 5(2) are sometimes spoken of as 'bottom line' requirements. Yet, one's immediate inclination is not to place too much reliance upon such a catch phrase. It seems preferable to approach the three paragraphs on the footing that each is to be afforded full significance and applied accordingly in the circumstances of the particular case, so that the promotion of the Act's purpose is effectively achieved (Mangakahia Maori Komiti vs. A. Rika and ors, p. 40).

The interpretation suggested there is distinctly one of balance, the environment being only one of several factors to be considered in decisions under the RMA over resource allocation. The text of the decision over the allocation of the water resources of the Mangakahia gave weight to this view in its emphasis on the economic benefits to individuals and the region. Commenting on the evidence put forward by the farmers, the Tribunal were:

> ...left in little doubt that in economic terms, the irrigation proposal would be beneficial, not only to the applicants themselves, but on a wider front. For one thing, the dairy company's nearest milk plant will be able to operate more efficiently... We accept that, through the irrigation, the farms as physical resources will be more efficiently employed, in that farm stock will be heavier and better animal health will result (Mangakahia Maori Komiti vs. A. Rika and ors, p. 36).

This view is further substantiated in the following statement that defines the nature of the Tribunal's compromise between economic benefits, management of the resource and Maori values:

> On the one hand it is said that to uphold the second appellants' (the MIC) case, or even the more restrictive basis of the consent represented by the council's decision, would involve a failure to provide for the well-being of

> the tangata whenua, particularly from a cultural standpoint... On the other hand, it is said that consent on the basis sought by the second appellants would provide, not just for their well-being, but for that of the wider Northland community from an economic perspective; further that abstractions from the river will be conservatively managed so as to protect the river as a resource in a way, or at a rate, which will enable Maori values and concerns to be suitably recognised and provided for (Mangakahia Maori Komiti vs. A. Rika and ors, p. 45).

From one perspective, the approach to the decision taken by the Tribunal is an appealing one, in that it represents an attempt to reach a compromise between competing interests in the environment. This is substantially what sustainability involves. While there is a logic that underpins the Minister for the Environment's argument that the RMA should be about environmental issues alone, in practical terms it will be impossible to make judgements about the use of resources without considering the various trade-offs that are at stake. On the other hand, the fact that economic values appear to triumph in the Mangakahia decision will confirm for some that little may have changed in the balance of priorities, irrespective of the fact that Aotearoa/New Zealand's resource management legislation makes specific overtures towards environmental and cultural considerations. This suggests that the sea-change of morality in respect of nature and in respect of the cultural values of indigenous people that some people see as fundamentally necessary for the progression towards sustainability (e.g. Bordessa, 1993; Frodemann, 1992) is yet to come in Aotearoa/New Zealand, despite the provocative wording of the regulations.

Interpreting 'regulatory space'

Regulation theory is one framework that has been advocated as a basis for the interpretation of sustainability (e.g. Flynn and Marsden, 1995). Despite this optimism, the links between regulation theory (Jessop, 1990, 1995; Tickell and Peck, 1992, 1995) and the sustainability problematic remain tenuous. The most obvious difficulty is the inability to translate into empirical reality the rather high-order constructs of regulation theory (Moran *et al.*, 1996). Another difficulty is the failure by analysts to distinguish clearly between regulation theory as high-order abstract theory, the practice of *real* regulation (cf. Clark, 1992; Marden, 1992) or *règlementation* as Cleary (1989) and Jessop (1995) would prefer, the state theory and legal interpretism from which Clark coined the term 'real' regulation, and *régulation*—the wider interpretations of 'real' regulation that Moran *et al.* (1996) and Munton (1995) have developed more recently.

In our analysis of the Mangakahia decision and the wider issues this case illustrates in terms of resource management, we adhere closely to the interpretation of real regulation developed by Moran *et al.* (1996). This interpretation makes explicit the contestation and setting of regulatory agendas and norms through social action, the legitimation process, be it parliamentary or societal, and its interpretation and contestation in the courts and other forums (Figure 2). In taking this approach, we acknowledge that sustainability is a social construction and, as such, it is contextually contingent (historically and geographically). In terms of Figure 2, the Mangakahia case necessarily focuses attention on the interpretative phase in the circuit of regulation. As the preceding discussion suggests, the contests over interpretation of the RMA are centred on the very fundamental question of what 'sustainable management' should mean—in terms of the relative emphasis given to environmental, social and economic priorities and, more specifically, what weight should be given to Maori perspectives on the appropriate use and management of resources. These issues were very much at the centre of the dispute over the use of water for pasture irrigation in the Mangakahia. As we will argue subsequently, it is helpful to recognise the geographic layering of the influences that prevailed in the interpretation of the legislation, as it was applied to the reconciliation of the competing claims over the Mangakahia. The irrigation case, for example, must be considered in the context of the restructuring agenda that has dominated New Zealand's political economy since the mid 1980s. The RMA, though,

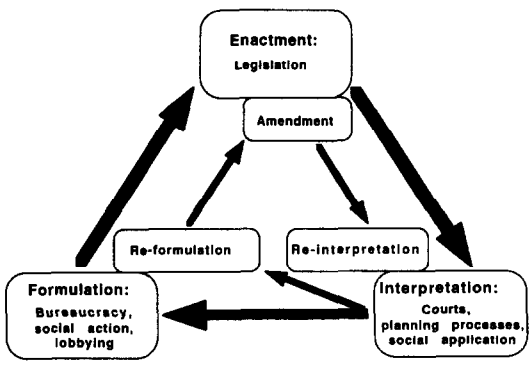

Figure 2. Real Regulation
Source: Moran *et al.*, 1996.

confers significant powers upon territorial local government agencies and so their role in the interpretation of the legislation is important also.

The description here of 'regulatory space' emphasises the geography of regulation. As well as the broad contextual influences established at international, national and regional scales, the role of local agency was particularly important in defining the contours of the debate. The MIC, for example, emphasised economic returns to pasture irrigation, while maintaining that the environmental effects would be negligible. The Maori Komiti, on the other hand, expressed concerns about the environmental implications but emphasised also their role as *kaitiaki* (guardians), and the cultural and spiritual significance of the river.

We argue that in the final event, the force of the respective arguments was determined by the underlying power and authority of the alternative discourses on sustainability. In short, in a society dominated by a Eurocentric worldview the discourse founded in expert testimony, economic rationalism and environmental managerialism was favoured over the arguments based in Maori customary practice and traditional cultural values. The role of discourse and the authority of alternative knowledge systems that underpin these discourses thus represents a further important dimension in our description of regulatory space. We draw on Lefebvre's construct of representational space and the Lefebvrian and Foucaultian notions of sites of resistance to interrogate the authority commanded by different perspectives on the sustainability metaphor.

In the discussion that follows, we provide a more detailed analysis of the interpretation of sustainable management under the RMA, focussing respectively on the closely integrated themes of the geography of regulation, local agency, and the role of discourse and competing regimes of truth and knowledge. Collectively, these dimensions help to provide a profile of regulatory space, a framework that affords an integrated explanation of the outcome of the contest over the interpretation of the intent and purpose of the RMA.

The geography of regulation

Recent literature on both regulation and on sustainability converge on the common theme of geography, and particularly an acknowledgment of the need to consider processes and structures represented at different geographic scales (ie., national, international, regional, and local). Referring to the sustainability of agricultural systems LeFroy *et al.* (1991), for example, noted that different values and constraints predominate at different geographic levels of food systems; the survival of the farm business at the enterprise level, while adequate food supply and export incomes are the main concerns at regional and national levels (see also Conway and Barbier, 1988; Smit and Smithers, 1993). In spite of a recognition of the relevance of geography within the sustainability literature, there has been little progress in understanding the nature of the interconnections among geographic levels, nor has there been much applied research that works explicitly between and among levels in the spatial hierarchy. It is of course a complex undertaking, not the least because scale itself is a construct susceptible to different interpretations; that is, levels in the arrangement of space are not fixed entities, but are constructs shaped by human context and agency. As McMichael (1996) recently noted, "...on their own, conceived in non-relational terms, global and local can only exist as reified levels of analysis" (p. 50).

Geography and regulation are inseparable because regulation is defined either implicitly or explicitly in jurisdictional terms. In his account of 'real' regulation, Clark (1992) argues that regulatory practice is differentiated in geographic terms, since cultural milieux are spatially variable. Thus the "...regulatory apparatus is not the same everywhere; its form and functions are local in one sense, and interpretation of its administrative rules and procedures are structured by history and geography in another sense" (Clark, 1992, p. 625). Similarly, Goodwin *et al.* (1995) and Moran *et al.* (1996) have demonstrated the significance of specific combinations of political, economic and social relations in giving rise to regulatory practices that are spatially differentiated. By way of example, Hancher and Moran (1989) point out that the ordinary courts secure the public authority of parliament in the United States and the United Kingdom, in contrast to their more limited interpretative role in France and Germany. The Aotearoa/New Zealand situation is similar to the American and British systems whereby the judicial interpretation of parliament's intent through case law is a cornerstone of the legal process. On this basis, we need to examine the incidence and interpretation of regulatory practice in different geographic settings, in order to understand better the geography

of regulation, as well as spatial relations in a more general sense.

What these and other commentaries on geography and regulation (see, for example, Marsden and Arce, 1995; Ward *et al.*, 1995) have in common is an attempt to clarify the characteristics of social, economic, cultural and political relations and how they interlink across different geographic levels. While there is a preponderant concern with how regulatory practice is shaped by geography, as when local agency mediates supralocal impulses, it is important to bear in mind Clark's (Clark, 1992) point that 'real' regulation is itself a socially constitutive process. Thus, the socio-cultural and economic milieux will be influenced by regulatory practice, because there is a recursive relationship between regulation and geography.

The Mangakahia case provides a useful exemplar in respect of some of the main issues that have been raised in reference to the geography of regulation. The role of the nation-state is significant, for example, both as it has responded over the last decade to the need to sustain capitalist accumulation in the Aotearoa/New Zealand economy and also through the implementation of environmental regulation like the RMA. Regulation theory in its more abstract variants (Aglietta, 1979; Jessop, 1990; Lipietz, 1987) seeks to explain the ongoing reorganisation of the state in order to maintain the process of capitalist accumulation. According to these explanations, the inherent instability of capitalism requires adjustments in social and economic relations in order to sustain accumulation. Faced with an economic crisis of considerable proportion during the 1980s, the Aotearoa/New Zealand government embarked upon a programme of economic restructuring without parallel in Aotearoa/New Zealand's history. The 'logic of reorganisation' (Flynn and Marsden, 1995) was substantially the same as that adopted in many other western nations; disengagement of the state from production and a greater emphasis on the market were expected to bring about gains in efficiency and general macro-economic health. Because Aotearoa/New Zealand had for a long time functioned as a highly protected nation-state and had consequently become markedly out-of-step with the international economy, emphasis was given to a firmer engagement with global economic dynamics. For farmers, the restructuring has meant the withdrawal of subsidies from the state, greater exposure to overseas competition, the imposition of charges for farm advisory services, and a greater emphasis on competitive markets. Overall, farmers are now more exposed to the vagaries of both domestic and international markets, but it is an environment that has the potential to reward innovators.

The Mangakahia case needs to be contextualised in part with reference to this neo-liberal restructuring of the Aotearoa/New Zealand economy and the administrative state, particularly in its emphasis on entreprenuerialism, individualism, economic efficiency, and a vision of Aotearoa/New Zealand participating in a globalised economy. The administrative and regulatory state in this country has been extensively reformed in concert with the neo-liberal ideology that has underpinned the restructuring programme. The national-level regulatory environment as it applies to our case is more complex than this, however. The programme of restructuring, which commenced in the mid-1980s, included a wholesale reorganisation of the administrative arrangements relating to resources and the environment, one important outcome of which was the RMA. The inclusion of an environmental agenda amidst the reforms of economy and other aspects of the administrative state has been described as something of an enigma (Britton *et al.*, 1992; Cocklin and Furuseth, 1994). Britton *et al.* (1992, page 15) commented: "The unique mix of economic and environmental principles in the reform process is fascinating, when considered in relation to the internationalisation of both the economy and the environmental movement". The impetus for, and the character of the reform of administrative and regulatory arrangements in respect of resources and the environment lie in a convergence of economic, political, social, as well as environmental priorities, operating at various spatial scales (Cocklin and Furuseth, 1994). Not surprisingly perhaps, the outcomes represent a potentially uneasy mix of free-marketeering and environmentalism.

The RMA establishes the national context in which decisions in respect of resources and the environment are taken. Recall, though, that one of the widely promoted features of the Act is that it assigns most of the decision-making authority to regional councils and territorial local authorities. Under this regime, the state establishes broad principles and guidelines, as well as some minimum standards, but then confers entitlements upon sub-national agencies to provide localised interpretations of meaning and intent. In other words, it is up to government at the regional and

local level to determine what sustainable management means, with reference their own environmental, economic and social circumstances. These localised interpretations are formalised through mandatory policy and planning documents, which the respective regional councils and territorial local authorities must prepare (Furuseth and Cocklin, 1995b).

Local and regional councils, then, act as arbiters in balancing environmental with social and economic priorities. These agencies therefore play an important role in mediating local environmental outcomes in the context of demands and processes emanating both within and beyond their jurisdictions. The mandate of these agencies is established largely by the RMA, but the councils are required under the Act to develop their own policy statements and plans, as local expressions of the priorities pertaining to the management of resources. Thus, the councils are an important locus of agency.

Whereas some regional councils have used their policy statements to present re-interpretations of the meaning of 'sustainable management' (Furuseth and Cocklin, 1995b), the NRC upholds the RMA definition as the foundation for resource management decisions. Specific policy objectives are included that refer to the maintenance of the natural flows and levels in streams and rivers that are recognised as having high ecological, cultural or scenic values, or which are recognised as having significant cultural values to Maori.

While acknowledging the central role of the councils in mediating the sustainable management of resources, it is relevant to the case we discuss here that interpretations of the legislation are subject to judicial review by the Planning Tribunal, if any of the interested parties choose to appeal the decisions handed down by regional councils or territorial local authorities. The wider significance of this lies in the fact that the interpretations of the intent and meaning of the RMA by the Planning Tribunal establish precedent in terms of the key constructs of resource management law.

Thus, the administrative-legal framework in Aotearoa/New Zealand is characterised by a hierarchy of 'regulatory space' (to draw on Hancher and Moran's terminology) at each level of which there is a tangible spatial jurisdiction. This mapping of jurisdictions and the legislation that underpins it has the effect of legitimating organisations and their various functions. These organisations are recognised in law as governing certain aspects of particular territories, and they are concerned with various aspects of regulation within defined territories. The most relevant in our case are the Regional Council and the Planning Tribunal.

For Lefebvre (1974), such territories are representational spaces that are "... conceived spaces, born of savoir and logic: maps, mathematics, the instrumental space of social engineers and urban planners" (Stewart, 1995, p. 610). In Aotearoa/New Zealand these spaces are defined from the perspective of the dominant Eurocentric worldview. By contrast, Maori have their own representational spaces, defined with reference to family, tribal and pan-tribal affiliations. These spaces have their own identifiable boundaries, boundaries known to them through their *whakapapa* (genealogy), and which do not coincide with the territories observed by the regulatory state. The representational spaces of Maori are inherently dissimilar to the dominant *Pakeha* (commonly, 'European') culture, because they are founded in a quite different human-environment relation.

Lefebvre's 'spaces of representation' (rather than representational spaces) alerts us to the possible implications of different worldviews. These spaces of representation are the lived spaces that are produced and modified over time and through use: they are invested with symbolism and meaning (Stewart, 1995, p. 610). Stewart prefers not to translate *connaissances* to help explain Lefebvre's spaces of representation: *connaissances* are 'knowledges that are less formal, more local'. Thus, for Maori, heritage (*whanau*) is intrinsically related to genealogy, locality and geography. In a particular place we recognise people as the *tangata whenua* which, translated literally, means people of the land; that place is their *turangawaewae*—their place to stand. Sense of place is profoundly inscribed, being based upon deeply set relationships between geographic location, an individual's physical identity, their personal, family and communal identity, spirituality, and day-to-day livelihood. Water is particularly significant, in both spiritual and utilitarian terms. Any disturbance of natural waters is a cultural anathema. The associations for the local Maori (the *tangata whenua*) between place, personal and communal identity, and the significance of water in Maori cosmology are fundamental to an understanding of their resistance to the proposals for water abstraction.

Local agency

Interpretation of the intent and meaning of the RMA is taking place at the local level. This local interpretation, and the associated conflicts, combined with the existence of different worldviews, reinforces the necessity to consider the role of local agency in regulatory and societal processes. While some studies on regulation (Jessop, 1990) have acknowledged the importance of local agency, Roberts (1995) suggested more recently that the contemporary emphasis on agency represents a progression of understanding beyond analyses that emphasised structure:

> Now that the force of their (the structuralists') arguments have been fully assimilated, the question of how to pursue issues of globalization and regulation and yet leave adequate room for agency and interconnections between various scales of action assumes greater importance (Roberts, 1995, p. 239).

A theme that has emerged in the commentaries on agency, in the regulation-based literature and more widely, is that the differentiation of geographic space in the context of global dynamics can be explained in part with recourse to the endurance of local values, understandings, and actions. Lobao (1996), for example, has suggested that local characteristics mediate the effects of processes operating at national and global levels, while at the same time the social relations of places are transformed by supralocal conditions.

Within the literature on regulatory analysis, Lowe *et al.* (1993), Marsden *et al.* (1993) and Marsden (1995) have introduced the notion of 'arenas of representation', in attempting to link structure and agency. These arenas on the one hand are structured by economic, social and political processes, but within them actors *represent* themselves with a view to achieving their own aims. Lowe *et al.* (1993) suggest that for analytical purposes it is useful to distinguish whether actors represent themselves 'economically' via the market or 'politically' via regulatory arrangements, while acknowledging that in reality these are closely interlinked. Because there are spatial variations in the market/regulation relation, this contributes to explanations of geographic diversity in outcomes. Lowe *et al.* (1993, p. 219) summarise their ideas in these terms:

> The notion of 'arenas of representation' has been suggested as a means of focussing attention on the interactions between key participants within these processes and how these are 'structured' by the contexts in which they take place (these contexts are, in turn, *re*structured by these interactions). Thus, the uneven development of rural space can be understood as the *outcome* of actions-in-context.

We accept their argument but suggest that it can be reinforced through recourse to Foucault and Lefebvre, a move that enables us to intersect better with the discourses on sustainability and the allocation of resources. Following the arguments of Hunt and Wickham (1994) in their interpretation of Foucault, we submit that the contestation of sustainability can be interpreted as a set of competing discourses through which people seek to bring to bear their particular vision. Regulations and decisions over resource use are interpreted and negotiated at the local level by various groups and agencies, and space is (re-)produced (cf. Lefebvre, 1974) as a result. This negotiation and interpretation of regulation occurs necessarily at local 'sites of resistance' (Foucault, 1980; Lefebvre, 1974), involving people and groups with different representations of the same physical territory or with different value systems. Hence, Lobao's (1996) notion of 'social capital' is appropriate because it entails a sense of social solidarity that is established through local networks, whereby 'senses of place' are important to 'sustaining cultures of resistance' (p. 95).

In the confrontation over the irrigation proposals, local agency was formalised through two main groups. One group was the Mangakahia Irrigation Committee (MIC), the coalition of farmers who jointly submitted their applications for water permits. To these farmers (who are all of European descent except for one Maori family), the Mangakahia is a landscape of production and family survival, which, for many of them, has been maintained over several generations. Their's is a conception of a productive pastoral landscape, with its associated social and economic relations. Through their financial strength, recourse to expert knowledges, and their position in the economic system they were able to enlist the support of many corporate bodies of significance in Northland. Thus, the MIC was able to muster considerable resources in support of their petitions for access to the water resources. These resources were combined with a sense of social status, borne of the historical and contemporary significance of pastoral agriculture in Aotearoa/New Zealand.

In contrast, the representation of Maori interests in

the dispute over the irrigation proposals was provided for principally by the Mangakahia Maori Komiti (committee), a group of nominated representatives of the main sub-tribal groups represented in the locality. In practice, the task of orchestrating the case against the applications fell largely upon one committed individual, who had little in the way of access to administrative resources and no formal training in resource management or the law. However, since Maori society is patriarchal, she was supported in the formal proceedings through representations by tribal (male) elders. The Komiti was able to engage a lawyer for the hearings before the Planning Tribunal. When this decision went against them, though, a shortage of financial resources meant that their subsequent appeal (to the High Court) had to be withdrawn.

Comment has been passed elsewhere on the 'transactions costs' that are burdening Maori throughout Aotearoa/New Zealand in terms of their engagement with the RMA (eg., Burton and Cocklin, 1996). On the one hand, the Act offers the promise of representation under the statute. The invitation is of course hard to resist and indeed Maori must contest decisions over resource allocation and use at this early juncture, in order to help shape the interpretations of the legislation. To fail to do so would almost certainly relegate Maori cultural values to a distinctly inferior position in future decisions. However, the capacity of Maori to participate meaningfully in the numerous decisions over resource allocation is emerging as a concern. "No matter what rights of Maori participation and interest recognition are written into the RMA, such language will have little meaning if Maori groups cannot sustain the participation costs of putting those rights into effect" (Burton and Cocklin, 1996, p. 101).

There is not much doubt that in the contest over the irrigation proposals, the two key parties to the dispute were unevenly matched in terms of their respective resources and probably also in their 'social capital' (cf. Lobao, 1996). The MIC put before the hearings the argument that the allocation of water would have no adverse effect upon the river ecology, supported by the testimony of expert consultants they had engaged. They also argued that the right to irrigate dairy pastures would provide both private and regional economic benefits; implicit within the latter argument is a particular interpretation of the RMA and its sustainable management principle. In this respect, the arguments of the MIC are reflective of a wider campaign of the farming lobby to ensure that legislation like the RMA does not unduly constrain opportunities for economic development. The objective in the Mangakahia case was to demonstrate economic value (both private and for the region) and to portray this as outweighing in both importance and magnitude the possible adverse effects in terms of the environment and the significance of the Maori worldview. The MMK presented their case on the basis of the language in the RMA that refers to their cultural and spiritual values and which in its reference to the Treaty of Waitangi implies that Maori should be given voice in decisions over resource allocation and use.

Power and the authority of competing discourses

By definition, rules and regulations are set usually by the dominant group in society. Thus, in the Aotearoa/New Zealand case, the rules have been set by New Zealanders of European descent ever since the advent of colonial administration in the 1840s. Inevitably, so too are jurisdictions (Lefebvre's representational spaces) and the interest areas of organisations. Indeed, the tendency is for (formal) representations of space, such as maps and jurisdictional boundaries, to be connected to 'formal or institutional apparatuses of power' (Stewart, 1995, p. 611, interpreting Lefebvre, 1974). Thus, European rules and values are intrinsic to the landscape of regulation in Aotearoa/New Zealand. As we have seen above, this framework appears unable to deal with other than instrumental values, despite the inclusion of specific Maori terms in the legislation that bodies such as the Planning Tribunal interpret and administer. The Planning Tribunal's conclusion that the Mangakahia Maori Komiti's concerns for the river were satisfied by allowing only a limited amount of abstraction of water and the imposition of minimum flow criteria appear to be indicative of this situation.

At this point it is useful to contemplate other ways that the notions of regulatory process, interpretation of sustainability, spaces of representation, and different worldviews can be extended and brought to bear on this case. Foucault made some salient points that open promising avenues for inquiry:

> Each society has its regime of truth, its 'general politics' of truth: that is, the type of discourse which it accepts and makes function as true; the mechanisms and instances which enable one to distinguish false and true statements, the means by which each is sanctioned; the techniques and procedures accorded value in the acquisition of truth;

> the status of those who are charged with saying what counts as true (Foucault, 1980, p. 131).

According to Hunt and Wickham,

> ...[t]his conception of truth intentionally pits itself against the views of truth that have been prevalent since the Enlightenment whereby truth is neutral, revealing itself only when it is separated from power, in the clear light of day under the scrutiny of scrupulous inquiry. For Foucault, truth is not counterposed to falsity or error, but rather regimes of truth lay down what is true and what is false. Truth operates through the exclusion, marginalisation and even prohibition of other competing truths; indeed it is itself a prodigious machinery designed to exclude (Foucault, 1980, p. 55).

> Truth is not separated by power, rather it is one of the most important vehicles and expressions of power; power is exercised through the production and dissemination of truth (Hunt and Wickham, 1994, p. 11).

The arguments that Foucault makes in the first passage and those summarised by Hunt and Wickham are of particular relevance to our analysis; that regimes or systems of truth exist, that these regimes of truth are sustained by discourses of truth, that discourses contain knowledge systems (that underpin the regimes of truth), that knowledge is a source of power, and that power carries with it and engenders resistance. Foucault made several salient points that stimulate our interpretations of regulation. Regimes or systems of truth establish what is true and what is false, or more accurately, what is accepted and what is not accepted as truth or falsity. These truth systems are sustained by their discourses and, naturally, different truth systems are characterised by their own discourse. The discourses of dominant groups within society tend to hold sway, and are reflected directly in regulatory structures, representational space, and ethical systems. Such is the case in a broad and tangible sense in Aotearoa/New Zealand where the Eurocentric worldview (of truth, justice, regulation, and morals) has progressively risen to ascendancy over the Maori worldview since the time of European settlement. The identification of such discourses and systems is possible at any time, but the differences are thrown into sharp relief when alternative systems collide, as in this case in the debate over the interpretation of sustainability and issues of environmental management.

Perhaps the best known feature of Foucault's work (according to Hunt and Wickham), is that knowledge is a major source of power. Because truth systems are sustained by their discourses and discourses contain knowledges, discourses are part of the practical tactics and techniques of power relations (rather than the Marxian concept of power as repression). This concept is applicable to our case study in two ways. One way is in the bringing together of considerable power through funding, expert knowledges and instrumental economic arguments. Added to this was the considerable lobbying power of some of the major businesses in Northland (e.g. Northland Dairy Company, Northpower, Van Den Bosch Irrigation) which argued that river abstraction would be economically beneficial to the region. Second, the dominant (Eurocentric) regulatory system was unable (in the Mangakahia case) to incorporate the Maori discourse on resource management. This despite the inclusion of specific sections and subsections in the RMA that contain Maori *connaissances* and which direct decision-makers to account for these factors. While the Maori perspective has been acknowledged at all stages of the resource consent process, and was in fact upheld in the initial refusal by the NRC of a resource consent, the decisions at all other levels have disregarded this view.

Further, we draw on Foucault for insight into how conflict occurs and how clashes between different truth systems are settled. On one side discourse transmits and produces power, and reinforces it. But there is a flip side: competing discourses also undermine and expose power and knowledge, render it fragile and make it possible to thwart it (Foucault, 1978, p. 101). For Hunt and Wickham (1994), pp. 16–17), "Foucault's conception of power always carries with it the strong insistence that power always involves and engenders 'resistance'" because:

> ...there are no relations of power without resistances; the latter are the more real and effective because they are formed right at the point where relations of power are exercised (Foucault, 1980, p. 142).

Finally, we find here an important point coincident with Lefebvre's work: Lefebvre's spaces of representation or *connaissances* incorporate (inherently) 'sites of resistance' and the location of counter discourses "which have not been grasped by power, or which refuse to acknowledge power" (Stewart, 1995, p. 611). Thus, the circle is complete; the sites of resistance mediate impulses, be they local, regional, national, global, or just from different discourses. The metaphor of sustainability is contested by different groups through competing discourses. In this case, the

dominant Eurocentric discourse has prevailed over the Maori in a local, quasi-judicial setting. The decisions by the Planning Tribunal have far reaching implications, because they reinforce the dominant discourse through legal precedent. Of course, this precedent could lean towards the counter-discourse but this would be unlikely.

Conclusions

Contests over the meaning and interpretation of 'sustainable management' are an inevitable consequence of the bold decision to imbed this as the key principle of Aotearoa/New Zealand's relatively new resource management legislation. The political potency of the sustainability imperative, combined with a legislative mandate underscore the fact that interest groups and individuals must stridently petition to establish interpretations that are consistent with their own objectives and purpose. The campaigns are being waged in a wide range of fora (e.g. the media, public input to policy documents, petitions to government etc.), but there is little question as to the central importance of specific decisions over the allocation and use of resources passed down by the courts. Therein lies the importance of the case we have considered here, in which interpretations of sustainability were contested in the context of competing claims for the use of water resources.

Acknowledging the claims in the literature that regulatory analysis, in its various forms, is appropriate to the interrogation of the sustainability problematic we have attempted to show here that 'real' regulation is a powerful framework for deconstructing the complex relations that extend across geographic scales, jurisdictions and cultures. Our analysis of the Mangakahia case confirms, for example, that regulatory practice is spatially differentiated and we have highlighted the role of local processes and actors in interpreting and mediating extra-local regulatory and economic forces. The sustainability discourse is part of the continual re-regulation of society, economy and environment, and consequently the (re)production of space. While sustainability has become incorporated into the many discourses of our contemporary society, it is being regulated and articulated primarily through the hegemonic discourses that prevail at the national level, while the outcomes are then (re)negotiated at local levels. The extent to which the respective local actors are able to achieve outcomes commensurate with their own objectives is determined in large part by their 'social capital' (Lobao, 1996).

The use of real regulation to underpin our analysis might suggest to some that we have used the dominant discourse of society to analyse circumstances which affect all of society. However, in using the broader definition of real regulation developed by Moran *et al.* (1996), we emphasise the inclusion of those within society that do not have an 'official' voice, groups that in this case have a quite different worldview from the dominating interests. In addition, we turned to Lefebvre and especially to Foucault for a framework within which to expose issues of inequality of power and access to resources, and through which to highlight contradictory discourses about sustainability.

The attention to contradictory discourses is particularly relevant to our case, because it involves a collision of cultures. The influence of distinctly different worldviews stands in sharp relief compared to variations across the inherently similar cultural milieux of the 'old world', from which much of the literature on place and 'the local' has emanated. In the presence of a distinctive cultural heterogeneity, the significance of Foucault for us lies in the different ways of thinking about power, regulation, and knowledge, and the way that discourse sustains truth systems. This is particularly relevant with regard to the clash of different cultures in the Mangakahia Valley. The MIC presented their case before the tribunal supported by the expert testimony and written reports of paid consultants; in short, in a way that is inherently part of the Eurocentric juridico-administrative system. By contrast, the Mangakahia Maori Komiti emphasised their use-values, and cultural and spiritual implications in presenting their testimony orally, in the tradition of Maori society. Not only was the information represented to the court in quite different ways, one clearly consistent with procedures of the legal system while the other was less so, but the testimony itself was founded in very different world views. Given the membership of the Planning Tribunal and its legalistic foundation, the property rights regime in Aotearoa/New Zealand, and the rationalist economic and environmental arguments presented by the MIC, it was more or less inevitable that the decision would be in favour of the dominant discourse. The dominant truth system succeeded in over-riding the discourse of resistance because of the self-reinforcement within the system—rationalist enlightenment thinking was

accepted because it underpins the existing legal-administrative-regulatory system.

Glossary of Maori terms

iwi	tribe
kaitiaki	guardians
kaitiakitanga	the exercise of guardianship
Pakeha	not Maori; European
tangata whenua	people of the land
taonga	highly prized possession; treasure
turangawaewae	place to stand
waahi tapu	place under religious or superstitious restriction
whakapapa	heritage
whanau	family

Definitions based on:

Ryan, P., 1989, The Revised Dictionary of Modern Maori. Heinemann, Auckland.

Resource Management Act, 1991.

Ministry for the Environment, New Zealand's National Report to the United Nations Conference on Environment and Development (1991).

Acknowledgements—The research on which this paper is based was supported financially by the N.Z. Foundation for Research, Science and Technology (Contract No. UOA-509). The comments of two anonymous referees and the helpful advice of the Editor are also gratefully acknowledged.

Notes

1. This is more than just a question of semantics. As we will show subsequently, key architects of the RMA were adamant from the outset that this is not intended to be a comprehensive planning statute and so 'sustainable *development*' is inconsistent with its purpose. According to this view, the Act is for the regulation of resource use and allocation. '*Sustainability*', with its strong environmentalist overtones, would have been rejected by many resource owners and developers.
2. Maori terms are also defined in the glossary at the end of this paper.
3. Interpretation of the Treaty has itself been a contentious issue, partly because there are two versions, one in English and one written in Maori. The nuances of language have invited some quite important interpretive differences. Even so, a concept of partnership seems to be generally acknowledged. Kawharu (1989) and Orange (1987) provide authoritative commentaries on the Treaty and its interpretation.
4. The concept of kaitiakitanga is basic to the Maori worldview. It is defined in the RMA as "the exercise of guardianship.... including stewardship based on the nature of the resource" (RMA, s. 2).
5. Translated literally, this means tribe. The term has come into common usage to refer to Maori of a particular area and in that sense is analogous to *tangata whenua* (people of the land).

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